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N. E. FARMER.

The subjoined communication from Dr C. T. Jackson, the learned geologist of Maine, deserves particular attention; and I am happy to make the N. E. Farmer the medium of its communication to the public. The subject to which it relates is constantly taking stronger hold upon the public attention. Let New Englanders never "give up the ship;" nor despair of making her agriculture as improved, as beautiful and productive as it is capable of being rendered. She need not, if she will do herself justice, dread for a moment a competition even with the most favored regions in any of the departments of human industry and skill; and every unfolding of her resources will serve to exalt the respect and to strengthen the attachment of her children to their native home. H. C.

Boston, Feb. 8, 1839.

MR HENRY COLMAN, *Agricultural Commissioner*,—

Dear Sir,—Having viewed with great interest the exertions which you and your scientific colaborer, Prof. Hitchcock, have made in behalf of agriculture and the treatment of soils of Massachusetts, I beg leave to offer for your consideration a few remarks on the influence of lime in amending soils so as to render them more capable of producing heavy crops of wheat.

The favorable influence of calcareous matter in the production of the crops above mentioned, has long since been fully recognized; but I am of opinion that farmers do not sufficiently value the effects produced by a very small per centage of lime in the soil. It has been too commonly supposed that enormous quantities were requisite to produce the desired effect, which according to my observations, is not the case, for I find that even in the apparently insignificant proportion of one per cent. that carbonate of lime exerts a beneficial effect, and that where the proportion amounts to from two to four per cent. the soil is decidedly luxuriant in cereal grains.

Let me then call your attention to the actual amount of carbonate of lime contained in a cubic foot of soil assuming its mean specific gravity to be 2,400,* that of water being 1,000.

A cubic foot of water weighs nearly 1000 oz., and hence a cubic foot of soil at the above specific gravity will weigh 2400 oz., which number of ounces being divided by 16, gives the number of pounds equal to 175 to the cubic foot. Allowing one per cent. of carbonate of lime in the soil, we shall have 1.75 lb. to the cubic foot of soil.

If it contained four per cent. of carbonate of lime we shall have four pounds to the cubic foot.

Since, however, the soil is rarely accessible to the roots of plants below the depth of six inches, we will allow in the first case .87 lb. or the amount in one-half cubic foot, and in the second 2 lbs. for the same depth. We see then that an apparently trifling per cent. of carbonate of lime in a soil amounts really to a large quantity when we consider the area in which it exists.

* See the specific gravity of soils of Mass. Prof. Hitchcock's Report.

The influence of lime is probably not yet fully understood, for besides combining with certain animal and vegetable matters forming compounds *gradually soluble*, and by that means retained in a proper condition for the constant supply of plants, and entering also into the composition of all grains and grasses; it evidently acts also in a chemical and physical manner in the soil, and upon the rootlets and spongioles of the plants exciting by a gradual electric power the endosmosis or internal impulse of liquids through the membranes forming the spongioles and cellules of the plants. Researches in this department of agricultural science offer a rich harvest of discovery to the physiologist and chemist, but little having yet been done. I have long since projected a series of experiments to elucidate some of the obscure and intricate laws which regulate the above mentioned functions, but constant absence from home during the summer months has as yet prevented my carrying them into full effect.

The influence of vegetable matters in soils has, I believe, been two commonly over-rated, and the effects of animal manures is not yet fully understood. If vegetable humus, soluble and insoluble geine were the sole requisites for luxuriant vegetation, our peat bogs should have been covered with the most abundant crops. The fact is however otherwise, and peat alone, although nearly pure vegetable matter, is known to be almost barren, and it is found sometimes when used without addition of other matters, to exert a most unfavorable influence on vegetation. Pure silex, alumina, lime or gypsum, are also totally barren; but a combination of these ingredients with a small proportion of vegetable matter produces a luxuriant soil. Peat, by proper management, is capable of being converted into a most valuable manure; but it is essential that it should be saturated with earthy or alcaline bases, and this is most easily effected, as I have formerly described, by making a compost of peat, animal manure and lime, in successive layers, so as to generate a large quantity of ammonia, which combines with the acid matters of the peat and also forms with the carbonic acid gas extricated a large quantity of carbonate of ammonia, which is absorbed by the peat, and is one of the most powerful saline manures.

Geate of lime alone is but little soluble, but is perhaps by that very reason retained more permanently in the soil and is gradually absorbed by the rootlets of plants.

Phosphoric acid generally exists in peat, and is by the action of calcareous matter converted into the phosphate of lime, one of the essential constituents of grain. Phosphate of alumina, as suggested by my scientific friend, Dr S. L. Dana, also exists in some soils, and by chemical reaction phosphate of lime may be formed and enter into the composition of the plants by absorption. Animal manures contain both the phosphate and carbonate of lime, and by fermentation carbonate of ammonia is also formed, large quantities of which is lost in the usual mode of keeping barn yard manures uncovered and exposed to rain.

The loss of the saline matters of manures by *solution* and *infiltration* is vastly greater than is commonly supposed by farmers. The evaporation to which so much loss is attributed is but a drop in the bucket in comparison with that of solution. Some maintain that manures never penetrate beyond the depth of a few inches; but this is a great error. The most important ingredients, viz. the soluble salts penetrate the earth to enormous depths, and we find animal matters in the well waters of Boston, 150 feet below the surface. I know also of instances where deep well water, formerly free from saline and animal matters, became charged with them two years after the top soil had been cultivated and dressed with animal manures. Hence it is evident that since all the fresh water of our wells infiltrates from the top soil that the soluble salts, whether of animal, vegetable or mineral nature, will be dissolved and carried down by the action of water, and they are, as I know, easily detected in the water at great depths. Hence the value of a clay substratum in our fields where the the soils are porous; and the facts coincide with theory as I have frequently had occasion to observe.

Saline matters act 1st, according to their nature as nutriments to the plants or by rendering soluble certain substances which are alimentary. 2d. By their stimulant and electro-motive power by exciting the irritability of the plant, and by producing electro-motive or endosmomic action in the spongioles and cellules. 3d. By stimulating the foliage of plants to absorb a larger amount of carbonic acid from the atmosphere, the latter property being possessed by salts which are not in themselves nutritious.

Thus small quantities of sea salt, gypsum, sulphate of soda, nitre, &c., act in the latter mode, and they should never be put upon the field until the germination of the seed is completed, nor before the second leaves of certain plants put forth; nor should they be thrown on the soil at the time when the seed is about to ripen, since these salts act wholly upon the *foliage* and promote the absorption of carbonic acid, a gas which is necessarily given off during the ripening action. Hence but very small quantities of saline stimuli are to be used, and they ought to be spread broad cast in powder at the time of the first hoeing of the field, after the foliage has acquired some development.

I would also mention in relation to saline manures that we must be governed in a measure as to the application by considering the native *habitat* of the plants under cultivation, and the composition of the soils in question. It is evident that if we would cultivate plants of a maritime origin in the interior of the country that marine salt will exert a beneficial tendency. Thus asparagus is a well known plant of maritime origin, requiring the use of sea salt for its full development. Cabbages will also

require a small quantity of salt from similar reasons.

Grass lands in the interior have their crops much augmented and also improved in flavor, by sprinkling salt over the soil.

In short, whenever we wish most fully to develop the foliage of plants and to render them more rich and palatable to animals, saline manures may be advantageously used.

In central France some very satisfactory experiments have been made upon this subject by Prof. Le Coq of Clermont-ferrand, and he finds that common marine salt in the proportion of from 150 to 300 pounds to the acre, according to the soil, using most on humid tracts, exerts a most beneficial influence. He advises the application of saline manures in small quantities, applied at two successive periods after the first foliage and before inflorescence.

I shall have occasion hereafter to present the farmers with the result of this physiologist's researches, and have not time now to enter more fully into details, sufficient having been said to serve as data for experimental trials.

Lime is the most useful of all our mineral amendments to soils, and by proper applications it may be rendered of immense value to the husbandman. Our peat bogs, by easy operations, are capable of furnishing materials for replenishing the vegetable matters as they are exhausted, and of serving as absorbents to retain saline matters possessing great fertilizing powers. I have an abundance of facts on this point, and numerous chemical analyses of soils, showing the improvements which are to be made in their cultivation. They are, however, too numerous here to recapitulate, and they will be fully stated in my Third Annual Report on the Geology of Maine, now ready for the press.

I congratulate you and the country on the new impetus which agriculture has received in its progress, by the combined researches of enterprising farmers and their scientific co-laborers. All important as is this greatest and first of arts, it cannot fail to delight every philanthropist to discover undeniable proofs of its rapid advancement and increased respectability as a department of human labor.

The time will come when distinguished scientific farmers will hold a high rank in the consideration of mankind, a rank belonging to them not only for their practical improvements, but for the elevated standing which they give their noble art.

Rural labor will be sweetened by the refined pleasures of science, and the field will present to the opened eyes of the farmer new worlds to conquer, while his own intellectual and moral powers will be enlarged and improved by the contemplation of phenomena at once revealing *supreme intelligence*, *unbounded goodness*, attributes of DIVINE POWER everywhere present in nature and calculated to excite our admiration and love.

Yours most respectfully,

C. T. JACKSON.

[For the New England Farmer.]

Dedham, April 1, 1839.

MR EDITOR—In the communication below there is a notice of the *Morus Expansa*, by my friend, D. Benedict, Esq., of Rhode Island, to whom I sold a variety of mulberry trees last fall. I have never had any personal experience with the Morus Expansa, but as a tree suited to our New England climate, I believe it has high claims, which will be noticed in my future publications.

Respectfully your friend and serv't,

J. H. COBB.

J. H. COBB, Esq.—Sir: The last edition of your Silk Manual I have perused with interest and satisfaction, and most cheerfully recommend it to all who are desirous of information on this new and interesting subject. Your account of the origin and character of the different kinds of mulberry trees, especially of the far-famed *Multicaulis*, is new and interesting. But there is one variety of trees, and in my opinion, one which in the end will be found the best of the whole, not excepting the exuberant Multicaulis, especially for northern latitudes, I was surprised to find you have entirely omitted. As there are but few of them yet in the country, it probably has not come under your observation, as it was not familiar with me until less than a year ago.

The *Morus Expansa* is the botanical name of the tree to which I refer.

Late last spring, by the recommendation of William Prince & Sons, and as a matter of experiment, I took a hundred of them from their nursery, which the year before were imported from France. They had stood in Prince's garden one winter, and the same in mine, without any shelter or protection, and all have lived as well as our native trees. In one season some of them grew from four to about eight feet trees, and to all appearance they will grow to any height desired. The leaves are the largest of any variety which I have seen, except the Multicaulis; they are very glossy and thick, and very agreeable to the worms. I fed worms enough the past season to grow upwards of three hundred pounds of cocoons, and in the course of my feeding, used all the varieties of leaves at present grown with us, and none of them were eaten more greedily or cleanly than those of the *Morus Expansa*. I intend to increase my stock of this variety, and am fully satisfied that as their superior excellence is known, they will become favorites with the cultivators of the mulberry tree for permanent use, as none of the precautions are needful for this species of tree, which the Multicaulis in cold regions now does, and in all probability will continue to require. From what country or latitude the tree originated, or when it was introduced into the country, I have not yet ascertained. As you are a student in these matters, in your next edition which I hope may soon be called for, you will confer a favor on the public, to give this excellent tree a place in your historical detail, and call their attention to its superior claims.

Yours, respectfully,

DAVID BENEDICT.

Pawtucket, R. I. March 22, 1839.

We proceed in the publication of Premium Farm Reports—intending to give them to the public with as much despatch as the state of our columns admits. They will be read, we are persuaded, with much interest. We give them without regard to any order, as is most convenient; but we shall very soon wind off the worsted. The subjoined account is from Mr Fay, in Southboro,' who received a gratuity of fifty dollars. H. C.

A Schedule of Peter Fay's Farm, situated in Southborough, in Worcester county, Mass., 1838.

Question 1. Answer—one hundred and fifty acres.

2. It consists of loam, gravelly loam and gravel, and the under stratum a clay gravel.

3. The best method of improving my land—the *plough* is decidedly the best.

4. I till about eighteen acres, and I put twentyfive loads of manure to an acre on that which I plant with corn and potatoes.

5. I apply it both in its long or green state and in compost.

6. I do both spread and plough in the manure put upon fields to be planted with corn and potatoes and also put it into the hills.

7. My method of cultivating green sward is by ploughing it at any part of the year and of frequently harrowing the same the year previous to its being planted.

8. I mow from thirty to thirtytwo acres of upland and averaging two to two and half tons to an acre.

9. I irrigate about four acres, commencing about the first of May, and allow the water to flow about one month, and I think I get about one-fourth more in quantity, and the quality not as good.

10. I do manure the land that I irrigate, and a part of my other land that I mow, once in two years, and I put twelve loads of compost manure to the acre.

11. I have mowed about ten acres of land not suitable for the plough, and the quality of the hay very ordinary, and producing more than five tons upon the same the present season.

12. My method of reclaiming my low land has been to dig out the stones and then to smooth or level the same, and give it a top dressing of loam or gravelly loam or gravel and then compost manure, and by seeding of herds grass, red top or clover, and roll in the same. On bog or peat meadow I never have performed any operations.

13. I have planted nine acres of corn the present season; my method of preparing the ground has been, of ploughing the same fine in the spring, then harrowing it, then carting on my manure and spreading it, then ploughing in the manure fine, and then rolling the land where it will admit, if not bushing it. Six acres of it I have cultivated in this way, by putting ten loads of long or green manure to an acre, and fourteen loads of compost manure in the hills, and planted the same in hills three feet and six inches apart each way. And on the three acres in addition to the ten loads of long or green manure to an acre, I spread fifteen loads of compost manure to an acre by putting the loads between the long or green manure, and ploughing in the same and not manuring it in the hills; hills four feet and six inches apart from east to west, and three feet apart from north to south. I soaked about one half of my corn in water about twenty-four hours and rolled the same in gypsum; the other half I planted dry without any preparation. When I planted my corn I put a table spoonful of gypsum into each hill, and when the corn had come up I put six bushels of wood ashes, lime and gypsum around the corn upon the hill, in the proportion of one half ashes, one fourth lime and one fourth gypsum to an acre upon the said nine acres. I used the cultivator instead of the plough among my corn and hoed the same three times, and made the hills of a small flat form.

14. I have planted five acres of potatoes the present year, four acres of which I ploughed the land fine in the spring, then harrowed it, ploughed it the second time fine, then spread twenty loads of compost manure on the acre and harrowed it in,

furrowed the ground four feet and six inches apart north and south and three feet apart east and west, and planted them the first week in May, when the ground froze every night, and on the north side of the wall the ground did not thaw through the day; when I planted the potatoes, I put a table spoonful of gypsum into each hill, and when the vine made its appearance through the ground, I put twelve bushels of wood ashes, lime and gypsum on the hills in the proportion of one half ashes, one fourth lime, and one fourth gypsum; I ploughed and hoed them three times. The produce was one hundred and sixty bushels to the acre. The kinds, a part of them a red potato called among us here the Rutland, and a part of them were the blue potato: the soil a gravelly loam.

The one acre was a green sward ploughed in about the middle of May, this spring, then harrowed the land and spread twentyfive loads of long or green manure to the acre, and planted it in rows three feet and six inches apart each way; ploughed and hoed the same twice: the soil was a gravelly loam: the produce one hundred bushels to the acre. The hot and dry weather in the month of August, was very severe with my potato crop upon both fields, and the product not half of an usual crop. The kinds of potatoes were the same as planted upon my other field.

15. I have among the corn in one of my fields of about three and a half acres, the English turnip, where my corn was very much injured by the crows, and the growth is extremely promising, but I have not harvested them now.

16. None this year of winter grain; of spring grain three acres and three quarters. The ground was prepared by ploughing it fine, then harrowing it, then cross ploughed it, then rolled it, sowed the grain and got it in with the cultivator; put no manure upon my land in the spring; the land the season previous having been planted with a potato crop; sowed two and a half bushels to an acre. My grain was all of wheat of the Black Sea kind, except one half bushel, and that was of the Italian: the soil of a gravelly loam of a hard pan bottom: my method of preparing the grain was by washing all the foul seed therefrom, then put the grain into baskets and let it drain until dry, then put the grain into tubs and soaked it in as strong a solution of salt and water as could be made to dissolve in the water at a heat of one hundred and twenty degrees, and soaked the same ten minutes, then took it out upon a floor and raked in as much of dry lime as would adhere to the grain. When the grain was up about three or four inches in height, I sowed eighteen bushels of wood ashes, lime and gypsum, in the proportion of one half ashes, one fourth lime and one fourth gypsum to an acre; this dressing is highly valuable to the wheat crop and to the succeeding crops of grass, and visible for a number of years, and one of the cheapest and best manures used.

The half bushel of Italian wheat was sowed upon the same field side by side of the Black Sea wheat, and the same process of preparing the land and seed was had as with the Black Sea wheat, and the produce was about the same with the Black Sea wheat, and the crop when ripe for harvest was one week later than the Black Sea wheat. The crop of both kinds was twenty bushels to an acre, and the last year I raised thirtyfive bushels to an acre of the Black Sea wheat; my wheat was sown the last week in April.

17. I have laid down three acres and three fourths of an acre to grass the present season; I sowed the seed on the first day of May; my usual practice of seeding is, half a bushel of herds grass, one peck of red-top, and ten pounds of clover seed to an acre, and I sowed the same quantity this year; and was sown with the grain crop after the grain was got in with the cultivator and then rolled in.

18. The means and manner of collecting and making manure, are from my cattle and hogs, and by digging the loam out from under my walls where I new set them or make new walls; the loam and sand beside the roads and from loam pits in my pastures, and the same carried into my barn yard.

19. I keep six oxen, twentysix cows, no young cattle, two horses, sheep none. One of my barns is 84 feet long and 30 feet wide, one other barn 50 feet long, 36 feet wide, and 20 feet posts, and a cellar under two-thirds of the same; one-third part of said cellar occupied for my hogs to lie under in the winter. Manure not covered.

20. My cows are all of the native breed.

21. I have raised no calves. I have fatted all my calves for the market this year and for several years past; I have fatted 37 calves for the market this year, which have brought me at my house $317; but I am convinced that I am pursuing a wrong course, and I intend to raise ten or twelve of my best calves yearly in future.

22. Of butter I have made up to the 15th day of October the present year, twentyfive hundred pounds and of cheese only for my own consumption, six hundred and fifty pounds of two meal and four meal and none of new milk.

23. Of swine I have on hand three old ones and twentytwo pigs; I intend to fat the three old ones and seventeen of the pigs, and keep five of the pigs through the winter for breeders; my swine are all of the native breed, and I make my pigs weigh on an average at ten months old, when dressed for the market, three hundred pounds, and have for many years past. I fatted seven thousand and one hundred pounds of pork the last year, and sold six thousand and five hundred pounds of the same, which brought me six hundred and fifty dollars.

24. I feed my swine through the summer upon the skim milk and whey from my dairy, and give them no meal in the summer; I fat them upon corn and potatoes; I boil my potatoes and mash them fine and make the composition in the proportion of one bushel of potatoes and half a bushel of meal, and keep my hogs dry and warm, and keep them well littered with straw, which is of the utmost importance in the fattening of hogs.

25. I have a yard in front of my barns, 100 feet in length by 75 feet in depth, where my cattle and swine all yard through the summer and winter; and I get from 300 to 400 loads of manure a year from the same, meaning all that I make of long or green manure and of compost. The materials are of loam, sand that I cart into the yard in the autumn after I have taken the manure out, and of meadow hay, straw and corn stover that I throw out into my yard for my cattle in the winter for them to pick over. It is decidedly the best way that cattle and swine be yarded together for the making of manure.

26. I employ upon my farm three men for eight months, commencing on the first of April, and one man in the winter, and one man three months by the day: I have paid fourteen, sixteen and seventeen dollars by the month for the eight months, and from five to six shillings by the day, and boarded said men.

27. I have five hundred of engrafted apple trees and from two to three hundred trees not engrafted.

28. I have 42 pear, 35 peach, 25 plum, 14 cherry, 8 apricot, and 4 almond trees.

29. My trees have never been attacked by the canker worm, to my knowledge; the borer has destroyed one apricot tree and four or five apple trees; I have not taken any means to destroy them.

30. I do not use any nor allow any ardent spirits on my farm, and have not for the last five years.

[For the New England Farmer.]

STURBRIDGE, Feb. 12, 1839.

MR EDITOR.—As it is a pleasure for farmers to communicate their ideas to each other, I think it is a great benefit and even a duty we owe to each other to gather up all fragments that nothing be lost. I offer you two short articles for publication, if you think them worth notice.

1. *On the Culture of Cabbages.*—About thirty years since the snow fell a considerable depth, early in the season, without much frost in the ground, and continued on the ground until late in spring, and many of the cabbage stumps in my cabbage ground lived through the winter. In April I ploughed the ground, turning in the old stumps. The first of May I began setting out early cabbage plants, and finding many of the old stumps had sprouted, and one of the red kind in particular; the sprouts had the appearance of a plant grown from the seed.

I examined and found the sprout came out of the stump very near to the root, while others farther up the stump were in a situation soon to blossom. I broke off all but the one nearest the root, and cultivated that in the way I did the other plants. In the fall I had a very large and handsome head. I carried it into the cellar, and set it out the next spring with the same success as before, and then continued setting out the same stump with others with it, two years more, from all which I had good heads.

I have set out stumps, occasionally, ever since, and always had good heads; therefore, I recommend it to the public as a good practice for raising cabbages for early fall use. I find in this method most kinds, except red cabbage, will be too early to keep through the winter.

My method is to cut them off near to the roots, leaving three or four eyes on the stumps, and set them out early in the spring, setting them in the ground slanting, say a slant of fortyfive degrees, then cover the end of the stump quite over with loose mould; when the sprouts get to the height of three inches, by pulling open the leaves you may easily ascertain those that will go to seed by the appearance of blossoms. Break off all of this description, leave only one without the appearance of blows and you will be likely to have good cabbages.

I have good red cabbages in my cellar this day raised by the method above described.

GARDINER WATKINS.

EARLY POTATOES.—The Easton (Maryland) Gazette notices a sample of forward Irish potatoes, grown this season, in the open ground, and now fit for use.

SERICICULTURE.

Mr Breck—I enclose a translation of an article from the Propagateur, of Rodez, on a disease which prevails in France among silk-worms, called the *Muscardine*, and another in relation to the *movable tables*, for magnaneries, invented by Mr Vasseur, which is considered a very important addition to those establishments. I regret that there was not a description of the tables given, for it may be very desirable to adopt them in this country. The discovery was first made known, and its advantages tested, last summer; but so ample is the testimony in their favor, that there does not appear to be a doubt, as to the great benefit, which has thus been conferred upon the cultivators of silk. I have written to a gentleman in Paris, to obtain and transmit to me, a particular description of the movable tables, and shall hasten to communicate the information I may receive.

The culture of the mulberry tree and the rearing of silk worms having excited unusual attention in France and Italy, within a few years; numerous works have been published on those subjects, and the authors have found it convenient to adopt the appropriate and expressive term of *Sericiculture*, as including whatever relates to both of the branches of that rural industry. It is derived from *Sericum*. The ancients being ignorant of the exact mode in which silk was produced, and having received it from the *Seres*, a people who inhabited that indefinite portion of Scythia, which they called *Serica*, but which is now known as China, the Romans gave the name of *Sericum* to that precious material.

This word having been used in the articles translated from the Propagateur and which appeared in the Farmer of the 27th ult. as well as in those which are annexed, the above explanation has been deemed necessary.

Very respectfully,
Your most ob't serv't,
H. A. S. DEARBORN.

Hawthorn Cottage,
Roxbury, March 29, 1839.

THE SILK WORM.

The contagious disease called the Muscardine, examined by Mr Audouin of the Institute.

The short visit which Mr Audouin recently made to our city, has been beneficial to the amateurs of natural history, and still more so to agriculturalists, to whom he has given information, as to the best means to be employed to prevent the ravages to their grape vines by the *Pyralis*. This learned professor, who has devoted his attention to insects which are injurious to agriculture, has made the most curious researches in relation to a contagious disease, which frequently occasions the destruction of all the silk worms in a magnanery. The culture of the latter being a recent branch of industry, in our department, and where it is destined to advance, we shall endeavor to give an analysis of the ingenious experiments, which have been undertaken by Mr Audouin, for discovering a fact in natural history, which is not only very curious, but fertile in the most important results to those, who are engaged in rearing silk worms.

There exists a disease called *Muscardine*, which successively attacks all the silk worms in a magnanery, and is transmitted from one to another. The nature of this disease, its development and propagation, has long been a mystery, which it has often been attempted to solve, but the veil has now been rent, as will be perceived by relating the experiments made by Mr Audouin.

What is the nature or real cause of the disease called the Muscardine?

The cause is the development of a vegetable which establishes itself as a parasite, in the subcutaneous tissue of the worm, and occasions its death in a few days, when the numerous filaments which it sends out, have filled and interlaced, with an inextricable net-work, all the oleaginous tissue of the insect.

What can be more astonishing than this vegetable, which is produced at the expense of an *animated, living body*, and ultimately perishes by causing the death of that very body in which it grows. It is an entirely new species, and appears to be placed in some manner, between the animal and vegetable realms.

This plant, which is of the genus botrytes (*cryptogamia*) is developed in the oleaginous sub-cutaneous tissue of the silk worm and rapidly extends its radicles, which branch off in a thousand directions. The worm perishes in six or seven days after being inoculated with the disease. The dead worm is, at first, soft and flaccid, soon becomes stiff and is covered with a white mealy dust, which is nothing more than the sporules or seed of the plant, supported by little stems which have pierced the pores of the skin. These sporules or seeds are so many germs of new plants; and being absorbed by the healthy worms, soon develop among them new plants, which is called the disease.

Let us come to the proof. Mr Audouin took on the point of a needle some of this white dust, which covered the body of a dead worm, with which he inoculated under the skin, another worm, as well as a chrysalis and a perfect winged insect, each of which in their turn, were covered with this white dust, being the fructification of the plant with which they had been inoculated.

This cryptogamia does not grow after the death of the insect, but only during its life, and causes the death of the insect by the development of its roots; and if this white dust does not always appear after the death of the insect, it is because the vegetable had not acquired sufficient maturity to produce its sporules or seeds. The whole progress of the growth of the vegetable can be seen by the aid of a microscope, in the insect which has been inoculated with the muscardine. The numerous radicles are multiplied from day to day; the oleaginous globules and the trachea gradually disappear and are replaced by the roots from which rise up, after the death of the insect, through the pores of the skin, little stems, and exhibit the sporules in the form of white dust.

It was not sufficient for Mr Audouin to have proved by repeated inoculations, that the muscardine was contagious, and that it was occasioned by the development of a vegetable—he has proved that it can be spontaneously produced, in all places, when certain circumstances are united to favor its development; it is thus that the larva of the *saperda* [Longicornus: the capricornus of Linn.] placed in situations filled with humid moss and submitted to various temperatures, have been spontaneously infected with muscardine; from whence he concludes that this disease is not peculiar to silk worms, but can be propagated from the silk worm to other insects, and *vice versa*; and that in all these transmissions, the cryptogamia and the disease which it produces, undergoes no change. In fact the vegetable can be reproduced, not only by sporules, but even in an artificial manner, by grafting certain parts of it, as its roots for example, upon the oleaginous tissue, and which extends itself much more rapidly by this mode of infection, and produces a much more sudden death than by the sporules.

This disease being now so well known, the means for protecting the silk worm from its ravages may be easily provided. First, it is necessary to prevent the atmospheric circumstances which produce it in the magnaneries; that is to say, a humid temperature, passing alternately from cold to hot; second, all contact between the healthy and diseased worms is to be avoided; third, sprinkle with the sulphate of copper the tables, shelves, or whatever else the diseased worms have been in contact with—a process which was introduced by Mr Berard of Montpelier; and be particularly minute in attentions to cleaning.—*Extract from the Journal of Charente Inferieure.*

L— S——,
Member of the Society of Natural Sciences at Rochelle.

Facts in relation to the New Process of Mr Vasseur, of Charmes, in the Department of Ardeche.

Valence, July 18, 1839.

The Agricultural Society of Drome, at a meeting on the 16th of this month, at which the Prefect presided, Mr Vasseur, of Charmes, was called upon to present the proofs, of what he had publicly advanced, in relation to the education of silk worms, which was done, and they were so conclusive, that there no longer remains a doubt that the results hitherto considered incredible, which were obtained, was in consequence of the substitution of movable tables.

The cocoons produced from the eggs of Dauphine, which required only 132 to make a pound, have yielded in the steam filatures of Messrs Blanchon father and sons, in Chomerac, at the rate of one pound of silk for ten pounds seven ounces, or 1369 cocoons. Those obtained from Italian eggs, 173 of which weighed a pound, yielded, in the steam filature of Mr Demichoux, in Flaniac, a pound of silk from eight pounds two ounces, or 1405 cocoons. The leaves consumed were in the following proportions: the silk worms of Dauphine made from 1272 pounds a quintal of cocoons; those of Italy consumed only 1200 pounds of leaves for a quintal. Mr Vasseur has deposited with the officers of the society, samples of the silk, and letters from the able proprietors of the filatures which we have named.

These results are immense. They establish this fact; that the cultivators of silk have not produced half as much as may be obtained from their magnaneries. In the steam filatures, about 3000 cocoons are required for a pound of silk, and Mr Vasseur has obtained the same quantity from 1369. There is, consequently, a result in favor of the cultivation, which shows a gain of half the quantity of leaves, of labor, space, and expenses of all kinds, besides the advantage derived to the proprietors of the filatures, who obtain a more beautiful quality of silk, with a great economy in labor, as 1369 cocoons are reeled in less time than is required for 3000. This is the principal point of view in which the discovery of the movable tables should be considered,—an invention which enables each worm to produce double the quantity of silk which has hith-

erto been obtained. Mr Vasseur has designated the persons who furnished the eggs of Dauphine and Italy. They have reared silk worms from the same kind of eggs in the old manner, and both had complete success, but still, the weight of the cocoons and that of the silk was much less.

By this augmentation of product, the income from that branch of industry in France will be doubled. How important then is this invention, if the experiments of the next year shall remove all doubts upon the subject; and we know that the experiment will be extensively made, for the proprietors of estates in the Departments Drome, Ardeche, Isere, and Van have determined to adopt the apparatus of Mr Vasseur.

But it is not necessary to wait until next year to be assured that there is gained at least 75 per cent. in the space which the worms occupy, besides the saving in labor, while the attendants perform all that is required to be done, in feeding and managing the silk worms without changing their position, and the ventilation is as perfect as can be desired.—*Extract from the Courrier of Drome and Ardeche.*

CORRESPONDENCE.

We are very happy to lay before our readers the subjoined correspondence. We do not know who 'Agricola' is, but his letter shows an inquisitive and intelligent mind, which always augurs well for improvement. Indeed without it there can be no improvement. Our respected correspondent who replies to him, deems his language harsh and his tone rather imperative. As far as it can be ascertained, we are to judge of things of this sort by the temper of mind from which they proceed. Now the language might have been more courteous and yet need not have lost anything in strength; but still we do not believe any offence was intended or thought of. We are so selfish that we should have been willing some offence should be given, if nothing short of this tone would have brought out the excellent reply which is here subjoined. It is directly to the point; and confirmed as it is by practice as well as theory; by long experience and most careful and intelligent observation, we cannot doubt that it will be received with the particular attention which it justly claims. H. C.

To the Editor of the New England Farmer:

Sir—In the "Report of the Committee of the Massachusetts Agricultural Society on Farms," printed in the New England Farmer of the 20th instant, there is a statement or recommendation by the committee, which is unintelligible to me, and which one of my agricultural friends was unable to explain. It is this: "Turn over sward land in May, and manure it with compost, which is to be mixed with the soil by the harrow or cultivator. If the first crop be corn, the second should be potatoes or roots, followed by wheat or rye, with grass seed, or with grass seed alone. During all this, the sod should not be disturbed, and no other ploughing but the first turning over of the sward. By this method there will be a great saving of labor, there being but one ploughing for two crops, and laying the ground to grass." Here is a course of cultivation for three years, *during all which time the ground is to be ploughed but once*, and that before the first crop only. It may be possible, though not a little difficult, to plant potatoes and cover them with the hoe alone, without any previous preparation of the ground, in the spring of the second year; but I know not how root crops could be sown without such preparation. The difficulty of sowing the wheat or rye with or without grass seed, the third season, will be still greater, inasmuch as the ground would be harder from the effect of the winter's rains and snow; the grains or seeds might indeed be *scattered on the surface*, but they would never get under it so as to vegetate. If the committee have any process in view *to take the place of ploughing, harrowing, &c.*, it ought to have been stated. The recommendation contained in the report is so manifestly absurd and impracticable, that I think something more must have been intended, and hope that the wanted information will be forthcoming, to enlighten those who do not know how to take things for granted which are not expressed in clear and distinct terms.

Yours, AGRICOLA.

[For the N. E. Farmer]

Mr Breck—Your correspondent 'Agricola' appears to meet with some difficulty in comprehending the recommendation of the committee of the Massachusetts Agricultural Society on Farms, in relation to the ploughing and management of green sward. The committee are charged with recommending a course of culture "*manifestly absurd and impracticable.*" If there be any pleasure greater than that of receiving information, it is that derived from a communication of it to others; and I shall not, therefore, allow my feelings to be so far disturbed by the peculiar language used by "Agricola," as to deprive me of that pleasure. I will only say that it would seem to me to be a course more consistent with candor, to examine a subject with which he professes not to be acquainted, before denouncing it as absurd and impracticable; and further, that harsh and uncourteous terms furnish no aid either in eliciting or defending truth.

I am willing to acknowledge that the error of not being sufficiently explicit, is one which is not unfrequently made by those who undertake to communicate information on subjects with which they themselves are perfectly familiar. They are too apt to forget that a more particular and detailed account of any process they may recommend, is necessary to enable those less acquainted with the subject to understand it.

The writer of the "Report" had for many years pursued the course therein recommended in relation to the management and culture of swarded land, and had again and again communicated the particulars of the process, as well as the results of his experiments, to the public. He might therefore be, in some measure, excused for not treating the subject as one entirely new and for the first time broached to the public. The explanation, however, *demanded* by "Agricola," I will give with pleasure, glad of any apology for repeating what I have so often stated, while there is a single farmer in the community by whom the subject is not fully understood. Such has been the almost magical effect upon our wasted and worn out fields, of turning over the green sward and keeping it undisturbed during the rotation of crops, that I know not how I can render a more essential service to my brother cultivators of the soil, than by enforcing its claims upon their attention.

"Agricola" supposes it will be "difficult to plant potatoes and cover them with the hoe alone, without any previous preparation of the ground in the spring of the second year," and "the difficulty of sowing the wheat or rye the third year, will be still greater," &c.

In preparing the ground for a second crop nothing more than the cultivator or harrow is necessary, and these to be used in such a way as not to disturb the soil. These will furnish a great abundance of matter for covering the potatoes. The decomposing sod which is kept down, will be found on examining it in the second or third year of the course, to be exceedingly mellow and lighter than it could possibly be made by the plough, and to be filled with the roots and giving nourishment to the plants. Now then, if the vegetable matter and the light vegetable mould which are turned and kept under, keep the sod mellow, and all above is well stirred by the cultivator and harrow, where is the difficulty of finding earth to cover the potatoes planted or the wheat and rye that is sown? In this way the whole mass is kept mellow to the depth of the first and only ploughing, and in fine condition for the growth of corn, potatoes or wheat, and particularly so for what is termed a "root crop." If desirable, I can see no objection to the use of a light horse plough in the second and third years' cultivation, provided the plough does not go so deep as to disturb the sod. I have, however, always found the cultivator and harrow sufficient for the purpose of pulverizing the top.

Lexington, March 26, 1839.

THE CROW AND THE WIRE WORMS.

Mr Colman—Dear Sir—In the Farmer of the 6th, I see you insert a very interesting letter from a gentleman of West Needham, giving an account of his success in raising the Dutton corn. The destruction of a large portion of his crop, by the *wire worm*, brought to my mind a fact which I not long since had from an observing gentleman of Maine.

Some years ago he noticed a field of grass which lay between a sandy gullied road and a river, to be completely destroyed by the ravages of what he called the wire worm. The whole roots of the green sward were eaten off, horizontally, just below the surface, so that the turf might be rolled off as in winrows. He observed the destruction with much curiosity and some apprehension, as his own fields lay close by, on the other side of the road. Day after day, as he rode by, he scared up from the sloping sides of a gully that ran between the ruined field and the road, great numbers of crows, who, as soon as he had passed, immediately settled on the same place again. He also watched the fields on the opposite side, but was gratified and not a little relieved, to find no traces of the worms there among the grass. Apparently they never crossed the road. After a while, there were no worms to be found, and no crows to be scared from the sides of the gully.

Very truly yours,

Philocorax.

Large Return from Rohan Potato.—Mr Ebenezer Stedman, of Newburyport, purchased of J. Breck & Co., at the Agricultural Warehouse, the last spring, five pounds of Rohan Potato. He planted them in hills, four feet apart, three eyes in a hill. He thinks two eyes would be enough. He states that from these he raised 525 lbs. At 20 cents per lb., the present price, his crop is worth $105 00.

NEW ENGLAND FARMER,

AND HORTICULTURAL REGISTER.

BOSTON, WEDNESDAY, APRIL 10, 1839.

AGRICULTURAL MEETING.

The twelfth Agricultural Meeting, and the last for the season, was holden on Tuesday evening, 2d inst.; and was fully attended, the interest in these meetings having been kept up until the last; and a strong wish expressed that they might be renewed another season. We have neglected to give a full report of the two former meetings: and we can now do no more than to gather up the fragments which remain, that nothing be lost.

At the tenth meeting the subjects of discussion were the cultivation of fruit trees, and the application of fruit to the feeding of stock. Two or three gentlemen detailed fully their experience; and of this we shall attempt to record only the most material facts.

Mr Stone, of Watertown, well known as an experienced and successful cultivator of fruit, went largely into the subject; and was examined and cross-examined with no small measure of legal acumen by several gentlemen present; and as closely as almost any witness that was ever brought upon the stand. He showed himself fully possessed on the subject, and communicated much valuable instruction.

Mr Stone spoke of having been for years accustomed to feed apples to his stock. He had sometimes made from one hundred to one hundred and fifty barrels of cider in a year; but having been disappointed in the market for his cider, he had given of late his apples to his stock. He had often fed out in a season from 1000 to 1200 bushels. The apples which he has been accustomed to give his cattle consisted principally of sour russetings, Baldwin, and nonesuch. They were the refuse after those, which were fit for the market, had been selected. His orchards consist mainly of engrafted fruit, with some common cider apples.

The apples are given raw. When the cold weather comes on they are put in the barn or the mill-house and sufficiently covered with salt hay to protect them from the frost. To his cows he usually gives one bushel per day; to his horses one peck at night; to his oxen as many as they are disposed to eat. In this way he considers his apples of equal value for feed as potatoes, bushel for bushel. The effect was that the cows under this feed increased their yield of milk; and he made from them more butter from November to January than at any other season; and they held out their milk well. His cattle never appeared better than on this feed; and they continued to improve as the season advanced. His cows became fat, and they had nothing but apples and hay; usually they had one feed of rowen per day; and for the rest of the time salt meadow or common swale hay. In one case he fatted a yoke of oxen upon this feed exclusively; and he thinks never with more success. In one instance he kept a cow in this way and sold her in February for seven and a half dollars per hundred lbs. He has found them equally beneficial to swine, which he has very successfully fatted upon sour apples with a small amount of slop or swill.

Mr Brigham, of Westboro', gave next his experience of the value of apples as feed for stock. Four years since he came in possession of an orchard, the fruit of which was fit only for making cider. He was then faithless in respect to the value of apples for feeding stock. He purchased six shoats and kept them four months upon sour apples. These apples were boiled. For the first week his swine lost flesh; after that time they continued to gain flesh and in four months doubled their weight. He has not been able however to fatten his swine upon them; but he has never fed them to his swine raw. He takes pains to assort his apples and feeds upon them until the first February. His stock will not eat them raw after having been accustomed to them cooked. With a small proportion of meal added he has found them highly useful. He has fed his cows successfully with apples. He tried first one cow, which he fed twice a day with sour apples. In three weeks after he added another cow and then another. The milk and cream were much increased and the butter improved. He has fed apples for two months and a half to a dairy stock of sixteen cows; and greatly to advantage in respect to the cream and milk. He usually gives out from 500 to 700 bushels; and his allowance to his cows is half a bushel per day each. He does not estimate them as highly as potatoes. He thinks he can give with safety to a cow as many apples as she will eat; but it is not so with potatoes. Sour apples, he thinks, should undergo a fermentation before they are used. He thinks all feed for swine should be fermented; but he deems potatoes of double the value of apples for swine; for milch cows he deems apples of equal value as potatoes. He has never been accustomed to salt his apples for his swine, which some farmers deem important.

Other gentlemen stated their experience of the value of apples as feed for stock. This is a modern, and it must be admitted a very important discovery.

The opinions and experience of these two observing and practical farmers are certainly of great importance. We have many similar facts tending as strongly to the same point from various parts of the state; and they all go to show the advantages which are to accrue from cultivating more extensively, than ever yet has been done, this most agreeable, nutritious and valuable fruit. There are, on almost every farm, places difficult of or ineligible for cultivation, which might as well as not, without prejudice or inconvenience be appropriated to the cultivation of these fruits; and if, when produced, they are even half as useful as potatoes, the ease with which they are produced and the abundance in which they grow, recommend them most strongly to the cultivation of the farmers. H. C.

We have received from John Benson, Esq. a few Dillingham potatoes as a sample. They are the product of an eastern region, but we are not able to say whether from our own territory or Nova Scotia, or the territory which belongs neither to the one nor the other. There is no dispute however, about the quality of the potatoes, come from where they may. They are of the very first rate, and farmers would do well to try some of them for seed; though it is pretty well established if we would raise as good potatoes as are raised at the east, we must have the eastern latitude and the eastern soil. Potatoes in order to be of the first quality, require a cool and moist climate and a new soil. An article of such universal use, an indispensable on the tables of the poor and the rich, and furnishing as large an amount of human and brute food as can be grown upon an acre, cannot receive too much attention in its improvement and cultivation.

The Rohan potato is likely to maintain its character as by far the most productive potato ever known; and from its superior quality, as we have tested, in soils not remarkably favorable to excellence of quality, there is reason to hope that, planted in some locations, it will prove of the very best description. H. C.

We shall give further reports of the proceedings at the last Agricultural meeting, but abstain at this time from deficiency of room. Dr Keep has promised to give us his interesting and instructive remarks on calcareous manures, in detail and in full.

The Commissioner of Agricultural Survey has received, through the politeness of Gen. Dearborn, a gentleman disinterestedly and enthusiastically devoted to every work of public improvement, and to whom the horticultural and agricultural community are most largely indebted, the silk-worm eggs procured through Mr Mey, and received by Capt Hunt. They are particularly mentioned in the N. E. Farmer of March 27th. They are but few in number, but he will take pains to distribute them in a way to accomplish the public-spirited views of the gentlemen who procured them. H. C.

EXPLANATION.

Some of our friends have inquired in regard to a remark in our last paper, respecting the cultivation of corn at the West, how one man could be expected to manage a lot of forty acres? We give the account as received on responsible authority, and not on personal observation. On the new lands at the West, they are not troubled with weeds, and no manure is applied. The sward is completely inverted, and the corn planted. After that no hilling is ever done, and all that is aimed at is, to keep the ground loose. A man and horse devoted to this object, would find no difficulty in going over such a lot of land many times in the course of the season with a cultivator, so as to maintain the soil in fine tilth. Nothing like this can be expected to be done with us; but an experiment upon a small scale, is exceedingly desirable.

The second Report on the Agriculture of Massachusetts, has been published by order of the government. Some few extra copies, printed at the expense of Messrs Joseph Breck & Co., and Weeks, Jordan & Co., may be found for sale at their respective stores.

CHINESE METHOD OF SOWING MULBERRY SEED. The subjoined we received from an authentic source as the method practised in China for starting and sowing the Mulberry Seed. At this time it will have a peculiar interest. H. C.

Directions for the Mulberry Seed by Ah-ho.—Fill a cotton bag with the seed, wet it with cold water, (not soaked,) and let it remain slightly wet; it will then sprout. Sprinkle the earth and proceed to sow it on the surface, covering it with a little dried tender grass. Should be two or three feet high before being transplanted.

PROFITABLE PIGS.—Pigs are as grateful as any other class of animals, for they *give* liberally in proportion as they *receive*. Mr J. C. Loomis, of Whately, slaughtered a sow in November last, which after having nineteen pigs in the course of five months, weighed four hundred eighteen pounds when dressed. One of her pigs, not ten months old, was recently slaughtered, which weighed three hundred and seventy pounds.

Mr Chapin, of Chicopee, sold his big ox which weighs 2800 pounds, to Mr Horatio Sargent, of Springfield, for three hundred dollars.

ERRATA.—We regret very much the occurrence of the subjoined errors in the address of the Hon. Mr Filley, in the last Farmer. In page 305, middle column, line 13th from bottom, for centering read entering—line 53d from bottom, for Barmgat read Barnegat. In page 306, first column, line 13th from top, dele . —line 52d, after tenderly insert paternal. Middle column, line 35th, for scolastic and folly, read and scholastic folly.

BRIGHTON MARKET.—Monday, April 8, 1839.

Reported for the New England Farmer.

At Market, 205 Beef Cattle, including 25 unsold last week, 15 Pairs Working Oxen, 20 Cows and Calves, 225 Sheep, and 1175 Swine.

Prices.—*Beef Cattle.*—A disposition was manifested by the drovers in the morning to obtain higher prices but without much success. The market closed without much variation. We quote, First quality, $8 75 a $9 00. Second quality, $8 00 a $8 50. Third quality, $6 75 a $7 75.

Working Oxen.—We noticed several sales ordinary, $68, $82, $90 and $100.

Sheep.—One lot at $4 50 and $5 00, and one at $6 50 and $6 75.

Swine.—Several lots to peddle, large size, at 8 7-8 a 9 7-8. Also, at 9 for sows and 10 for barrows. Several lots of large barrows at 9; at retail 10 to 11 1-2.

THERMOMETRICAL.

Reported for the New England Farmer.

Range of the Thermometer at the Garden of the proprietors of the New England Farmer, Brighton, Mass. in a shaded Northerly exposure, week ending April 7.

April, 1839.		7 A.M.	12, M.	5, P.M.	Wind.
Monday,	1	26	53	52	W.
Tuesday,	2	42	48	36	N. E.
Wednesday,	3	38	49	42	N. E.
Thursday,	4	32	64	56	E.
Friday,	5	40	58	38	E.
Saturday,	6	37	57	60	S. W.
Sunday,	7	50	74	64	W.

WINSHIP'S BRIGTON NURSERIES,

AND BOTANIC GARDENS.

Fruit and Ornamental Trees, Shrubs, Creepers, Herbaceous, Perennials, Green House Plants, &c.

Orders addressed to Messrs WINSHIPS, Brighton, Mass., will be promptly executed, and forwarded to any part of this or other countries.

April 10.

GRAPE VINES.

150 Sweet Water Grape Vines.
200 Isabella, " "
150 Catawba, " "
100 Black Hamburg Grape Vines.
1000 Asparagus Roots.
100 Early Wilmot Rhubarb Roots.
200 Common " "

Also—Strawberry Plants of the following choice kinds: Methven Castle, Bath Scarlet, Hauthois, English Wood, Monthly, &c. Raspberries, Franconia White and Red. Gooseberries—Currants—Flowering Shrubs and Plants of all kinds supplied at short notice, by

JOSEPH BRECK & CO.

April 10. 51 and 52 North Market Street.

Just received at the New England Farmer Office, the Second Report on the Agriculture of Massachusetts, by Henry Colman, Commissioner for the the Agricultural Survey of the State. For sale by JOSEPH BRECK & CO.

April 10. 51 and 52 North Market St.

NOTICE.

The subscribers, publishers of the Indiana Farmer, at Indianapolis, have in connection a Book and Seed Store and a field of eight acres adjoining for a seed garden; but wishing to devote their time and attention more exclusively to the interests of their paper and the printing business, they offer for sale their Garden and Book and Seed department, and to rent the store they occupy, favorably situated in the business part of the town.

A person acquainted with the seed and horticultural business would find this a desirable location for a permanent establishment, not exceeded by any in the west. For further information inquire of the publishers of the New England Farmer, or of the subscribers by letter.

April 10. OSBORN & WILLETS.

A BULL WANTED.

Wanted a young Bull, of the short horned Durham breed, old enough to be used the present season. Apply to

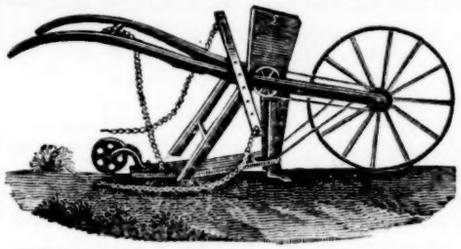
April 10. JOSEPH BRECK & CO.

SAYLE'S GARDEN ENGINE.

For sale at the New England Agricultural Warehouse, Nos. 51 and 52 North Market Street, Sayle's Garden Engines. This Engine is a splendid article, and will throw a constant stream of water to the distance of 50 or 60 feet, with great force, and in case of fire would be a good substitue for a fire engine. It is the most perfect article for the purpose ever introduced. JOSEPH BRECK & CO.

April 3.

WILLIS'S LATEST IMPROVED SEED SOWER



Willis's latest Improved Seed Sower, invented the last season; one of the most perfect machines ever introduced for the purpose. In using this machine, the farmer may be certain that his seed is put into the ground, and at the same time in the best possible manner. There has been a great difficulty in machines for sowing garden seeds; they are very apt to clog up, and the farmer might go over an acre of land and not sow a single seed; but not so with this; it is so constructed that it cannot possibly clog. In using this sower, the farmer can save one half of his seed, and do the work at less than one quarter the expense of the common way of sowing his seeds, and have it done in a much better manner; it opens the furrow, drops the seed, and covers it over and rolls them down. It will sow almost any kind of Garden Seeds; say Ruta Baga, Mangel Wurtzel, Turnips, Carrots, Beets, Parsnips, Onions, Corn, &c. It is highly recommended by a great number of persons who have used it the present season. For sale at the N. E. Agricultural Warehouse and Seed Store by JOSEPH BRECK & CO.

April 3.

EARLY AND LATE PEAS.

For sale at the N. E Agricultural Warehouse and Seed Store, a choice assortment of Early Peas, consisting of—

Cedo Nulli, extra fine and early,	Early Charlton,
Early Warwick, do. do.	Knights' Tall Marrow,
Early Washington,	Knights' Dwarf do.
Russel's Early Dwarf,	Fall Sugar,
Bishop's do. do.	Dwarf Sugar, eatable pods,
Early English Frame,	Fall Late Marrow Fats,
Early Golden Hotspur,	Dwarf do do.
Blue Prussian,	Blue Imperial,
	Woodford's Tall Marrow.

In addition to our usual stock of Peas, we have recently received a few varieties of very superior Peas from England, viz:

Marquis of Hastings, extra fine Marrow,
Early White Warwick, early and fine,
Cedo Nulli, very early,
Waterloo Blue, fine large blue,
Groom's Improved Blue,
White Scimetar.

All of which are remarkably fine, and are considered as some of the most desirable varieties cultivated here or in England. JOSEPH BRECK & CO.

March 27.

FRUIT TREES, &c.

Pears, Plums, Raspberries, Roses, &c.

The subscribers have recently received, per the Switzerland from Harve, a large assortment of the choicest varieties of Pear and Plum Trees, from one of the best Nurseries in France, together with a small Collection of superb French Roses, all in excellent order for transplanting, which they offer for sale at the New England Agricultural Warehouse and Seed Store, No. 52 North Market Street. The Pear and Plums are from 6 to 7 feet high, and will be sold at $1 00 each.

PLUMS.

Downtown's Imperatrice	Perdregon
New Orleans	Isleworth
Old Orleans	Reine Claude
Green Gage	Mirabelle pettite
Golden Drop	Mirabelle grosse
Early Monsieur	St Catherine
Late Monsieur	Royal du Tours

PEARS ON PEAR STOCKS.

Josephine	Beurré Capiamont
Beurré Spence	Autumn Burgamotte
Charmontelle	Esgargne or jargonnelle
Lousia Bonney	Buerre Rance (new)
William Bon Cretien	Buerre Royal or Buerre Diel
Orange Burgamotte	Burgamotte du pasque
Catherine	Sieulle (new)
Passe Colmar	Buerré Thuin
Louis Bonne d'Auranche	Buerré Magnifique
Dutchesse d'Angoulême	

PEARS IN QUINCE STOCKS.

Burgamotte d'Penticôte, or Eastern Beurré.
Beurré d'Amanlis.
Beurré Doré.
Mouille Bonche, Mouthwater.
Beurré d'Aremburg.

Orders received for Fruit and Ornamental Trees at Nursery prices. JOSEPH BRECK & CO.

WHOLESALE PRICES CURRENT.

CORRECTED WITH GREAT CARE, WEEKLY.

			FROM	TO
Ashes, Pearl, per 100 lbs.			7 00	7 25
Pot, " " "			5 25	5 37
Beans, white, Foreign,		bushel	2 00	2 62
" " Domestic,		"	2 00	3 00
Beef, mess,		barrel	16 00	16 50
No. 1.		"	14 00	
prime,		"	12 00	
Beeswax, white,		pound	35	38
yellow,		"	28	34
Cheese, new milk,		"	8	10
Bone Manure,		bushel		35
in casks,		"		40
Feathers, northern, geese,		pound		
southern, geese,		"	37	46
Flax. (American)		"	9	12
Fish, Cod, Grand Bank,		quintal	4 25	4 37
Bay,		"	3 50	4 00
Mackerel. No. 1		barrel	13 00	13 50
Flour, Genesee, cash,		"	8 62	8 75
Baltimore, Howard street,		"	7 25	8 00
Richmond canal,		"		
Alexandria wharf,		"	7 62	7 75
Rye,		"	5 50	5 75
Meal, Indian, in bbls.		"	4 25	4 50
Grain: Corn, northern yellow,		bushel	98	1 00
southern flat, yellow,		"	95	96
white,		"	91	92
Rye, northern,		"	1 20	1 25
Barley,		"	87	90
Oats, northern, (prime)		"	60	
Hay, best English, per ton,			18 00	19 00
Eastern screwed,			16 50	17 50
Hops, 1st quality,		pound	14	16
2d quality,		"	13	14
Lard, Boston, 1st sort,		"	12	13
southern, 1st sort,		"	11	12
Leather, Philadelphia city tannage,		"	29	30
do. country do.		"	25	27
Baltimore city tannage,		"	26	28
do. dry hides,		"	24	25
New York red, light,		"	23	25
Boston, do. slaughter,		"	23	24
Boston dry hides,		"	21	23
Lime, best sort,		cask	90	1 00
Oil, Sperm, Spring and Summer,		gallon		
Winter,		"	1 20	
Whale, refined.		"	50	60
Linseed, American,		"		
Neat's Foot,		"	95	1 00
Plaster Paris, per ton of 2200 lbs.			3 25	3 37
Pork, extra clear,		barrel	26 00	
clear,		"		26 00
Mess,		"	23 00	
Seeds: Herd's Grass,		bushel	3 00	3 12
Red Top, southern,		"	90	1 12
northern,		"		1 50
Canary,		"	1 50	1 60
Hemp,		"	2 62	3 00
Flax,		"	1 75	1 87
Red Clover, northern,		pound	20	22
Southern Clover, none,		"		
Soap, American, No. 1,		"	6	7
" No. 2,		"	5	6
Tallow, tried,		"	13	14
Teazles, 1st sort,		pr M.	3 00	3 50
Wool, prime, or Saxony Fleeces,		pound	57	62
American, full blood, washed,		"	52	55
do. 3-4ths do.		"	47	50
do. 1-2 do.		"	42	45
do. 1-4 and common,		"	37	40
Northern pulled. Pulled superfine,		"	52	55
No. 1,		"	47	50
No. 2,		"	30	35
No. 3,		"		

PROVISION MARKET.

RETAIL PRICES.

Hams, northern,	'pound	14	15
southern and western,	"	12	13
Pork, whole hogs,	"	10	11
Poultry, per lb.,	"	15	20
Butter, tub,	"	18	25
lump,	"	24	28
Eggs,	dozen	15	18
Potatoes, Chenango,	bushel		65
white,	"		55
Apples, Baldwin's	barrel	2 50	3 00
Russetts,	"		2 50
Cider,	"	3 00	3 25
refined,	"	4 50	5 00

FOR SALE.

A few Hives of Bees at the New England Farmer Office.

March 20. JOSEPH BRECK &CO.

MISCELLANEOUS.

ILLINOIS AND THE WEST.

We have already gratified our readers, as we have no doubt, with some extracts from the work under the above title. It is a book, which in a small compass, contains much useful information in an agreeable style; and from the interest now taken in this growing empire at the West, cannot fail to attract deserved attention. Being written from actual observation rather than compiled, it has a double value. It contains the actual impressions and observations of an observing and sensible man.

We extract some general remarks on the state of the society and provision for education in Illinois.

—

"A very false opinion of the literature and morality, as well as of the opportunities for education at the west, prevails to such an extent among well informed people at the east, that I deem it not inexpedient to devote a chapter to these subjects, by which I hope to promote juster and more favorable views. I suppose it is generally understood in New England, that the large towns and cities in Illinois and other parts of the west, are tolerably well supplied with literary men in all the professions. But it is as generally supposed that the smaller inland towns and villages, and especially the agricultural portions, are exceedingly destitute of talent or literature. Such, I know, was in some degree my own impression; and I well remember hearing a fifth-rate lawyer in Boston, who was making arrangements for quitting the place where promotion was beyond hope, speak of his expectations of success here in such a manner as plainly showed that he expected nothing less than a judgeship or a seat in congress: whereas he will find himself as much a fifth-rate lawyer here as in Boston. The truth is, there is as fair a proportion of talent in Illinois, as in any other State in the Union in proportion to its population. There are, it is true, but a very few minds of the highest order—men who are marked as the leaders of our republic, or stars of the first magnitude in the literary galaxy of America—but there is an unusual amount of very respectable, clever talent; there are a large number of men whose literary and classical acquirements fit them for every office, and would make them ornaments of any society in North America. Nor are they to be found alone in our larger towns; they are very liberally strewed over all the soil of this great and growing State. In traveling through the country, one will meet with a well thumbed and select library in the log cabin, and listen to discourse on any topic in that rude home which would give spirit and life to an assemblage in a Boston drawing-room. Already there is a sufficient amount of literary talent in Illinois to fill with ability and success any chair of professorship in any educational institution, or any office of trust in the gift of the people. But all this talent is not available. Much of it is withdrawn from active life, and is to be met but in the seclusion of agricultural life. Yet there is enough for any present exigency, and as the field of action enlarges itself, the whole ground will be covered by immigration, or the annual graduations from their own literary institutions.

Indeed, a man of respectable talents, coming from the east or south, finds here many and powerful competitors, and will have to work his way to favor or wealth in his profession, much as he would elsewhere. It is true there is less competition because there is a wider field, the facilities are multiplied and multiplying, instead of being nearly exhausted, as is the case in the east. A young man of enterprise and a small capital, whether in law, medicine, engineering, surveying, or in the mercantile business, stands a much fairer chance to succeed in either here, than any where east or south, because not only is his field larger and competition less, but new sources of wealth and power are developed every day, and more and more. But the same talent, tact and industry are requisite here as elsewhere. The difference is, he *must* succeed here, elsewhere he *may*.

Let no young man intending to pursue either of the above professions, set his face westward with the false impression that a small modicum of talent or education and a careless devotion to his business, will secure him either a competence or honor. He will suffer sad disappointment. On the other hand let no young man hesitate an instant, who has a fair share of talent and tact, and whose patience will enable him to endure, and disposition to prosecute, the labors necessary to success. He can but succeed—fame and wealth, with a fair proportion of enjoyment, are here in store for all such, provided all this be accompanied with an integrity of purpose which no temptation can seduce, and perseverance which no disappointment can overcome. I intend to devote a larger space to mechanics and farmers with hints to emigrants in general, in which will be found some interesting matter respecting labor, produce, prices, travelling, settling, etc. etc.

TRUE CHARITY.—One of the most beautiful instances of the considerate kindness of true charity with which we are acquainted, is that of the benevolent Dr Wilson of England. He once discovered a clergyman at Bath, who, as he was informed, was sick and poor, and at the same time oppressed with the care of maintaining a numerous family. In the evening he gave a friend fifty pounds, requesting he would deliver it in the most delicate manner, and as from an unknown person. The friend replied, "I will wait upon him early in the morning." "You will oblige me, sir, by calling directly. Think of what importance a good night's rest may be to that poor man."—*Christian Register.*

A Stockholm journal announces that M. Orgesson, a Swede, possessing extensive domains near Helsingfors, in Finland, has discovered a means of rendering peat as compact and hard as coal, so that it lights with great facility, burns without crackling, throws out a clear bright flame, and gives as much, if not more, heat than coal. The peat when prepared loses one-fifth of its weight, and three-eighths of its bulk, but gains the advantage of having the whole of its aqueous parts extracted.

Linseed Oil Meal. Teel Seed Oil Meal.

For sale by G. & H. STEARNS, who have removed to No 5 Merchants Row.
March 27. 1m

PEAR TREES FOR SALE.

At the Pomological Garden, Salem, Mass., a good collection of Standard Pear Trees, all of which have been proved. They comprise the choicest of the old and new varieties

Also—Scions of Fruit Trees.

Scions of a great variety of Apples, Pears, Plums, and Cherries, from bearing Trees, for sale by the subscriber.
April 3. ROBERT MANNING.

BUCK THORNS.

For sale at the New England Farmer Office by
April 3. JOSEPH BRECK & CO.

FRUIT AND ORNAMENTAL TREES, MULBERRIES, &c.

Nursery of William Kenrick.

The Catalogue of Fruit and Ornamental Trees for 1839 is now ready, and will be sent to all who apply. It comprises a most extensive selection of the superior varieties of Pears, Apples, Plums, Quinces, Gooseberries, Raspberries, Currants, Strawberries, Grape Vines, &c. The stock of Cherries and of Peaches now ready is particularly large. Also, Ornamental Trees, Shrubs, Roses, Honeysuckles, Pæonies, Dahlias and other Herbaceous Flowering Plants.

10,000 Cockspar or Newcastle Thorns.
10,000 Buckthorns.

Morus Multicaulis, and other Mulberries; the trees genuine and fine, at prices fair, and varying with the size, and the quantity which may be desired.

Fruit and all other trees, when so ordered, will be securely packed for safe transportation to distant places, and orders promptly executed, on application to the subscriber.

WILLIAM KENRICK.

Nonantum Hill, Newton, near Boston.
January 30, 1839.

PEAR, PLUM, GRAPE VINES, &C.

1000 Pear Trees of the most approved kinds;
1000 Plum Trees, of the most approved kinds and extra size—many of them have borne the past season;
500 Quince Trees;
3000 Isabella and Catawba Grape Vines, from 6 to 15 feet high, most of them have borne fruit—Black Hamburgh, Sweetwater, Pond's Seedling;
30,000 Giant Asparagus Roots;
5000 Wilmot's Early Rhubarb or Pie Plant, lately introduced;

Also—a good assortment of Gooseberries, Roses, &c. of different kinds;

All orders left at this office, or with the subscriber at Cambridge-port, or in Mr Lynch's baggage wagon box, at Gould & Howe's, No. 8 Faneul Hall, will meet with immediate attention. SAMUEL POND,
March 27. Cambridge-port, Mass.

HO! FOR ILLINOIS.

To a *first rate man*, well acquainted with *trade*, who can command a ready capital of from $3,000 to $6,000, who is desirous of locating himself in one of the most beautiful and healthy situations on Rock River, in Illinois, where he can join a New England Colony, and engage in Mercantile and Agricultural pursuits, with a rare prospect of success, *a first rate opening* offers itself, and may be heard of by addressing a line (post paid) through the City Post Office, to

X. Y. Z.

N. B. An exchange of Western property, for real estate in New England, a good stock may be effected.
March 27. 3w

MAN AND BOY.

Wanted a man who is acquainted with vegetable and fruit gardening; he must be of *good moral character*, active, constantly industrious, and a *temperance* man—he is wanted for the season, and perhaps he can secure a permanent situation.

Also—*A good boy*, he must be willing to give his whole time and attention, and he will be thoroughly instructed in the business—he must produce good recommodations—none other need apply.
March 20.

FARM FOR SALE OR TO LET.

The subscriber offers for sale or to let, a farm situated on Charles River, in the north part of Newton, and near the Newton Chemical Works. It contains fifty acres or upwards of good land, and has on it a good house and other buildings. Its pleasant situation on the bank of the river renders it a desirable place for a country seat, or its vicinity to the Waltham Factories an excellent location for a market or vegetable farm. Forty acres can be added to the above, if desired.
March 13. 4wis* SETH BEMIS, Watertown.

FARM FOR SALE.

For sale a valuable farm, situated in Newton, half a mile from the Upper Falls Village and ten miles from Boston. The farm comprises about 100 acres of land, one third of which is covered with a thrifty growth of wood and fencing timber. It has a good well of water, besides a never failing brook which passes through the farm. The buildings are of ample size, and in good repair. A lot of about ten acres of the land near the buildings, is on a level plain of superior quality for the growth of the mulberry tree For particulars inquire of Miss Ann Bent, 214 Washington Street, or of E. F. Woodward, near the premises.
Boston, March 6, 1839. tf

THE NEW ENGLAND FARMER

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